

WHAT IS CLAIMED IS:

1. A device comprising:

a memory cell comprising:

a body region doped with charge carriers of a first type;

a source region disposed in the body region and doped with charge carriers of a second type; and

a drain region disposed in the body region and doped with charge carriers of the second type,

wherein the body region, the source region, and the drain region are oriented in a first direction, wherein the body region and the source region form a first junction, wherein the body region and the drain region form a second junction, and wherein a conductivity of the first junction from the body region to the source region in a case that the first junction is unbiased is substantially less than a conductivity of the second junction from the body region to the drain region in a case that the second junction is unbiased; and

a transistor oriented in a second direction, wherein the second direction is not parallel to the first direction.

2. A device according to Claim 1, the transistor further comprising:

a halo implant.

3. A device according to Claim 2, wherein the memory cell does not include a halo implant.

4. A device according to Claim 1, further comprising:

a trench adjacent to the body region to separate the body region from an adjacent memory cell.

5. A device according to Claim 1, further comprising:

a conductive element disposed over the body region, the conductive element oriented substantially perpendicular to the first direction.

6. A device according to Claim 5, the conductive element to prevent fabrication of a halo implant in the memory cell.

7. A device according to Claim 1, further comprising:

a second memory cell including a second body region, the second body region and the body region of the memory cell oriented in a direction substantially perpendicular to the first direction.

8. A device according to Claim 7, further comprising:

a conductive element disposed over the body region and the second body region, the conductive element oriented in the direction.

9. A device according to Claim 8, the conductive element to prevent fabrication of a halo implant in the memory cell and in the second memory cell.

10. A method comprising:

fabricating a memory cell of a device, the memory cell comprising a body region doped with charge carriers of a first type, a source region disposed in the body region and doped with charge carriers of a second type, and a drain region disposed in the body region and doped with

charge carriers of the second type, wherein the body region, the source region, and the drain region are oriented in a first direction, wherein the body region and the source region form a first junction, wherein the body region and the drain region form a second junction, and wherein a conductivity of the first junction from the body region to the source region in a case that the first junction is unbiased is substantially less than a conductivity of the second junction from the body region to the drain region in a case that the second junction is unbiased;

  fabricating a transistor of the device, the transistor oriented in a second direction, wherein the second direction is not parallel to the first direction; and

  fabricating a halo implant within the transistor,  
  wherein a halo implant is not fabricated in the memory cell.

11. A method according to Claim 10, further comprising:

  fabricating a conductive element disposed over the body region.

12. A method according to Claim 11, the conductive element to prevent fabrication of a halo implant in the memory cell.

13. A method according to Claim 10, further comprising:

  fabricating a second memory cell including a second body region, the second body region and the body region of the memory cell oriented in a direction substantially perpendicular to the first direction.

14. A method according to Claim 13, further comprising:

  fabricating a conductive element disposed over the body region and the second body region, the conductive element oriented in the direction.

15. A method according to Claim 14, the conductive element to prevent fabrication of a halo implant in the memory cell.

16. A system comprising:

a microprocessor comprising a memory cell,

the memory cell comprising:

a body region doped with charge carriers of a first type;

a source region disposed in the body region and doped with charge carriers of a second type; and

a drain region disposed in the body region and doped with charge carriers of the second type; and

a transistor oriented in a second direction,

wherein the body region, the source region, and the drain region are oriented in a first direction, wherein the second direction is not parallel to the first direction, wherein the body region and the source region form a first junction, wherein the body region and the drain region form a second junction, and wherein a conductivity of the first junction from the body region to the source region in a case that the first junction is unbiased is substantially less than a conductivity of the second junction from the body region to the drain region in a case that the second junction is unbiased; and

a double data rate memory coupled to the microprocessor.

17. A system according to Claim 16, the transistor further comprising:

a halo implant.

18. A system according to Claim 17, wherein the memory cell does not include a halo implant.

19. A system according to Claim 16, further comprising:

a trench adjacent to the body region to separate the body region from an adjacent memory cell.

20. A system according to Claim 16, further comprising:

a conductive element disposed over the body region, the conductive element oriented substantially perpendicular to the first direction.

21. A system according to Claim 20, the conductive element to prevent fabrication of a halo implant in the memory cell.

22. A system according to Claim 16, further comprising:

a second memory cell including a second body region, the second body region and the body region of the memory cell oriented in a direction substantially perpendicular to the first direction.

23. A system according to Claim 22, further comprising:

a conductive element disposed over the body region and the second body region, the conductive element oriented in the direction.

24. A system according to Claim 23, the conductive element to prevent fabrication of a halo implant in the memory cell and in the second memory cell.